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## STATEMENT BY APPLICANT

(use as many sheets as necessary)

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Complete if Known				
Application Number	09/620,544			
Filing Date	07/21/2000			
First Named Inventor	Petro Estakhri			
Group Art Unit	2188			
Examiner Name	Reginald G. Bragdon			
Attorney Docket Number	38979-11C4			

	U.	S. PATENT DO	CUMENTS		
	U.S. Patent Document		T	Date of Publication of	Pages, Columns, Lines,
A1	2003/0033471	A1	Lin et al.	02/13/2003	
A2	6,411,546	B1	Estakhri et al.	06/05/2002	
A3	6,397,314	B1	Estakhri et al.	05/28/2002	
A4	6,393,513	B2	Estakhri et al.	05/21/2002	
A5 .	6,374,337	B1	Estakhri	04/16/2002	
A6	6,279,114	B1	Toombs et al.	08/21/2001	
A7	6,279,069	B1	Robinson et al.	08/21/2001	
A8	6,272,610	B1	Katayama et al.	08/07/2001	
A9	6,262,918	B1	Estakhri et al.	07/17/2001	
A10	6,230,234	B1	Estakhri et al.	05/08/2001	
A11	6,226,708	B1	McGoldrick et al.	05/01/2001	
A12	6,223,308	B1	Estakhri et al.	04/24/2001	
A13	6,202,138	B1	Estakhri et al.	03/13/2000	· ·
A14	6,182,162	B1	Estakhri et al.	01/30/2001	
A15	6,181,118	B1	Meehan et al.	01/30/2001	
A16	6,173,362	B1	Yoda	01/09/2001	
A17	6,151,247		Estakhri et al.	11/21/2000	
A18	6,145,051		Estakhri et al.	11/07/2000	
A19	6,141,249		Estakhri et al.	10/31/2000	
A20	6,134,151		Estakhri et al.	10/17/2000	
A21	6,134,145		Wong	10/17/2000	
A22	6,128,695	-	Estakhri et al.	10/03/2000	
A23	6,125,435		Estakhri et al.	09/26/2000	
. A24	6,125,424		Komatsu et al.	09/26/2000	
A25	6,122,195		Estakhri et al.	09/19/2000	
A26	6,115,785		Estakhri et al.	09/05/2000	
A27	6,097,666		Sakui et al.	08/01/2000	
A28	6,081,878		Estakhri et al.	06/27/2000	
A29	6,081,447		Lofgren et al.	06/27/2000	
A30	6,072,796		Christensen et al.	06/06/2000	
A31	6,055,188		Takeuchi et al.	04/25/2000	
A32	6,055,184		Acharya et al.	04/25/2000	
A33	6,047,352		Lakhani et al.	04/04/2000	
A34	6,040,997		Estakrhi	03/21/2000	
A35	。 6,035,357		Sakaki	03/07/2000	
A36	6,034,897		Estakhri et al.	03/07/2000	
A37	6,026,027		Terrell, II et al.	02/15/2000	
A38	6,026,020		Matsubara et al.	02/15/2000	
A39	6,021,408		Ledain et al.	02/01/2000	
A40	6,011,323		Camp	01/04/2000	
. A41	6,011,322		Hiraka	01/04/2000	
A42	5,991,849		Yamada et al.	11/23/1999	
A43	5,987,573		Hiraka	11/16/1999	

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Substitute for fo	orm 1449A/PTO	Alls 2 0 mm (S)	Complete if Known			
1	Ę	AU6 3 0 2004 2	Application Number	09/620,544		
INF	ORMATION	<b>NDISCFQ</b> SU	Filing Date	07/21/2000		
STA	ATEMENT E	BY APPLICA	First Named Inventor	Petro Estakhri		
			Group Art Unit	2188	-	
	(use as many she	eets as necessary)		<b>Examiner Name</b>	Reginald G. Brage	don
Sheet	2	of	6	Attorney Docket Number	38979-11C4	
	A44	5,987,563		Itoh et al.	11/16/1999	
	A45	5,986,933		Takeuchi et al.	11/16/1999	
	A46	5,966,727		Nishino et al.	10/12/1999	•
_	A47	5,959,926		Jones et al.	09/28/1999	-
	A48	5,956,473		Ma et al.	09/21/1999	
	A49	5,953,737		Estakhri et al.	09/14/1999	·
	A50	5,937,425		Ban	08/10/1999	· · · · · · · · · · · · · · · · · · ·
	A51	5,936,971		Harari et al.	08/10/1999	
	A52	5,933,846		Endo	08/03/1999	
	A53	5,933,368		Ma et al.	08/03/1999	
	A54	5,930,815		Estakhri et al.	07/27/1999	
	A55	5,928,370		Asnaashari	07/27/1999	
	A56	5,920,884	-	Jennings, III et al.	07/06/1999	
	A57	5,909,586		Anderson	06/01/1999	
	A58	5,907,856		Estakhri et al.	05/25/1999	
	A59	5,901,086		Wang et al.	05/04/1999	
	A60	5,890,192		Lee et al.	03/30/1999	
	. A61	5,862,099		Gannage et al.	01/19/1999	
_	A62	5,860,124	·	Matthews et al.	01/12/1999	
	A63	5,860,083		Sukeawa	01/12/1999	
	A64	5,847,552		Brown	12/08/1998	
	A65	5,845,313		Estakhri et al.	12/01/1998	
	A66	5,835,935		Estakhri et al.	11/10/1998	
	A67	5,831,929		Manning	11/03/1998	
	A68	5,822,781		Wells et al.	10/13/1998	
	A69	5,822,252		Lee et al.	10/13/1998	
	A70	5,822,245		Gupta et al.	01/13/1998	
	A71	5,818,781		Estakhri et al.	10/06/1998	
	A72	5,809,560	1	Schneider	09/15/1998	
	A73	5,809,558	ļ	Matthews et al.	09/15/1998	
	A74	5,809,515	<u> </u>	Kaki et al.	09/15/1998	
	A75	5,802,551	<b> </b>	Komatsu et al.	09/01/1998	
	A76	5,799,168		Ban	08/25/1998	
	A77	5,787,484	-	Norman	07/28/1998	
	A78	5,787,445		Daberko	07/28/1998	
	A79	5,781,478	1	Takeeuchi et al.	07/14/1998	
	A80	5,773,901	<del> </del>	Kanter	06/30/1998	
	A81	5,768,195	<del> </del>	Nakamura et al.	06/16/1998	
	A82	5,768,190	<del> </del>	Tanaka et al.	06/16/1998	
	A83	5,761,117	<del> </del>	Uchino et al.	06/02/1998	
	A84	5,758,100	<del>                                     </del>	Odisho	05/26/1998	
	A85 A86	5,757,712 5,754,567	-	Nagel et al.	05/26/1998	
	A86 A87	5,754,567	<del> </del>	Norman Ma et al	05/19/1998	
<del> </del>	A88	5,745,418 5,734,567	<del>                                     </del>	Ma et al. Griffiths et al.	04/28/1998 03/31/1998	
·	A89	5,723,990	+	Roohparvar	03/03/1998	
l	703	5,725,350	<u> </u>	Tooliparvai	7 , 03/03/1990	···

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Substitute for fo	orm 1449A/PTO	AUG 3 0 2004 C	Application 09/620,544			
l inc			Number	07/04/0000		
		n somberd n		Filing Date	07/21/2000	
STA	ATEMENT I	BY APPLICA	First Named Inventor	Petro Estakhri		
			Group Art Unit	2188		
	(use as many sh	eets as necessary)		Examiner Name	Reginald G. Bragdon	
Sheet	3	of	6	Attorney Docket Number	38979-11C4	
	A90	5,648,929		Miyamoto	07/15/1997	
	A91	5,611,067		Okamoto et al.	03/11/1997	
	A92	5,603,001		Sukegawa et al.	02/11/1997	
	A93	5,602,987		Harari et al.	02/11/1997	
•	A94	5,598,370		Niisima et al.	01/28/1997	
	A95	5,592,415		Kato et al.	01/07/1997	
	A96	5,581,723		Hasbun et al.	12/03/1996	
<u> </u>	A97	5,579,502		Konishi et al.	11/26/1996	
	- A98	5,572,466		Sukegawa	11/05/1996	
	A99	5,552,698		Tai et al.	09/03/1996	
	A100	5,544,356		Robinson	08/06/1996	
	A101	5,541,551		Brehner et al.	07/30/1996	
	A102	5,530,938		Akasaka et al.	06/25/1996	
	A103	5,530,828		Kaki et al.	06/25/1996	
	A104	5,530,673		Tobita et al.	06/25/1996	
	A105	5,524,230		Sakaue et al.	06/04/1996	
· · · · · · · · · · · · · · · · · · ·	A106 A107	5,523,980		Sakui et al.	06/04/1996	
	A107	5,519,847 5,515,333		Fandrich et al.	05/21/1996	
	A108	5,513,138		Fujita et al.  Manabe et al.	05/07/1996 04/30/1996	
	A110	5,490,117		Oda et al.	02/06/1996	
<u> </u>	A111	5,479,638		Assar et al.	12/26/1995	
	A112	5,473,765		Gibbons et al.	12/05/1995	
-10	A113	5,465,338		Clay	11/07/1995	
	A114	5,465,235		Miyamoto	11/07/1995	
	A115	5,431,330		Wieres	07/11/1995	
	A116	5,430,682		Ishikawa et al.	07/04/1995	
	A117	5,422,856		Sasaki et al.	06/06/1995	
	A118	5,418,752		Harari et al.	05/23/1995	
	A119	5,406,527		Honma	04/11/1995	
	A120	5,404,485		Ban	04/04/1995	
	A121	5,388,083		Assar et al.	02/07/1995	
	A122	5,384,743		Rouy	01/24/1995	
	A123	5,382,839		Shinohara	01/17/1995	
	A124	5,381,539		Yanai et al.	01/10/1995	
	A125	5,371,702		Nakai et al.	12/06/1994	
	A126	5,365,127	<del> </del>	Manley	11/15/1994	
	A126B	5,359,569		Fujita et al.	10/25/1994	
	A127 A128	5,341,341 5,341,339		Fukazo Wells	08/23/1994	
	A128	5,341,339		Wells et al.	08/23/1994 08/23/1994	
	A130	5,329,491		Brown et al.	07/12/1994	
	1	1 -,0=0,.01	L	2.0000 00 00.	0771271304	

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STATEMENT BY APPLICANT

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of

5,315,558

5,305,278

5,305,276

5,303,198

5,267,218

5,253,351

5,227,714

5,220,518

5,218,695

5,093,785

4,970,727

4,970,642

4,943,745

4,843,224

4,829,169

4,797,543

4,788,665

4,780,855

4,609,833

4,532,590

4,476,526

4,473,878

4,468,730

4,414,627

4,398,248

4,309,627

4,130,900

4,099,069

35,881 Re.

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**Application** 

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Tabata

Watanabe

Cricchi et al.

Barrett et al.

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Number	·
Filing Date	07/21/2000
First Named Inventor	Petro Estakhri
Group Art Unit	2188
Examiner Name	Reginald G. Bragdon
Attorney Docket Number	38979-11C4
 Hag	05/24/1994
Inoue	04/19/1994
Uenoyama	04/19/1994
Adachi et al.	04/12/1994
Elbert	11/30/1993
Yamamoto et al.	10/12/1993
Lou	07/13/1993
Haq	06/15/1993
 Noveck et al.	06/08/1993
Iljima	03/03/1992
Miyawaki et al.	11/13/1990
 Yamamura	11/13/1990
 Watanabe et al.	07/24/1990
Ohta et al.	06/27/1989
 Watanabe	05/09/1989
Watanabe	01/10/1989
 Fukuda et al.	11/29/1988
lida et al.	10/25/1988
Gutterman	09/02/1986
Wallach et al.	07/30/1985
 Dodd	10/09/1984
Zolnowsky et al.	09/25/1984
 Dodd et al.	08/28/1984
 Nakamura	11/08/1983

08/09/1983

01/05/1982

12/19/1978

07/04/1978 08/25/1998 (Reissued)

		Fo Document	oreign Patent			Date of Publication of	Pages, Columns, Lines,	
Examiner Initials*	Cite No. <sup>1</sup>	Count y Code	Number <sup>4</sup>	Kind Code <sup>5</sup> ( <i>if known</i> )	Name of Patentee or Applicant of Cited Document	Cited Document MM-DD-YYYY	Where Relevant Passages or Relevant Figures Appear	T <sup>©</sup>
	B1		0 663 636	A1	Sun Microsystems, Inc.	07/19/1995		
	B2		0 619 541	A2	Hitachi, Ltd., Hitachi Keiyo Engineering Co., Ltd, Hitachi ULSI Engineering Corp.	10/12/1994		
	B3		0 617 363	A2	Sundisk Corporation	09/28/1994		
	B4		0 613 151	A2	Kabushiki Kaisha Toshiba	08/31/1994		_
	B5		0 522 780	A2	International Business Machines Corporation	01/13/1993		
	B6		0 522 780	B1	International Business Machines Corporation	01/13/1993		
	B7		0 392 895	A2	Sundisk Corporation	10/17/1990		

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## INFORMATION DISCLOSURE STATEMENT BY APPRILIPANT

Complete if Known				
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(use as many sheets as necessary)						Group Art Unit 2188		···		
				Examiner Name			Reginald G. Bragdon			
Sheet		5	of	6		Attorney Docket N	Number	38979-11C4		
	B8		2 304 428		Mitsu	bishi Denki Kabushiki Kaisha	03/19/	1997		
	В9		2 291 990		Me	emory Corporation	02/07/	1996		
	B10		2 251 323			ntel Corporation	07/01/	1992	·	
	B11		9-147581		Hita VLS	chi Co., Ltd., Hitachi Il Engineering Corp.	06/06/	1997	<del>~</del>	
	B12		8-69696			Toshiba Corp.	03/12/	1996		
	B13		8-18018			Toshiba Corp.	01/19/	1996		
	B14		7-93499		VLS Sem	chi Co., Ltd., Hitachi I Engineering Corp., Hitachi Tobu niconductor Co., Ltd.	04/07/	1995		
	B15		7-311708		K.K.,	i Film Micro Device Fuji Photo Film Co., Ltd.	11/28/	1995		
	B16		7-114499				05/02/	1995		
	B17		6-36578		Sor	ıy Kabushiki Kaisha	02/10/	1994		
	B18		6-266596			Hitachi Ltd.	09/22/	1994		
	B19		6-149395			NEC	05/27/	1994		
	B20		6-132747		Fujit	su Ltd., Fujitsu VLSI Ltd.	05/13/	1994		
	B21		6-131889		, To	shiba Corporation	05/13/	1994		
	B22		6-124231		Тс	shiba Corporation	05/06/	1994		
	B23		6-124175			Sharp Corp.	05/06/	1994		
	B24		5-282883			Toshiba Corp.	10/29/	1993		
	B25		5-128877		Mitis	subishi Electric Corp.	05/25/	1993		
	B26		4-57295		1	NEC Corporation	02/25/	1992		
	B27		4-278297			Toshiba Corp.	10/02/	1992		
	B28		4-268284		Fuji	Photo Film Co., Ltd	09/24/	1992		
	B29		4-254994			Toshiba Corp.	09/10/	1992		
٠.	B30		RM-37697				02/21/	1996	<u>.                                      </u>	
	B31		3-228377			Toshiba Corp.	10/09/	1981		
	B32		1-138694		Nipp	oon Denki Kabushiki Kaisha	05/31	1989		
	В33		WO 94/20906			M-Systems Ltd.	09/15/	1994		
	B34		SU 1686449	A2	Koze a	. Parkhomenko, S.B. elkov, V.Yu Lozbenev nd S.S. Karpenko	10/23/	1991		
	B35		SU 1573458	A2	Lozbe	Parkhomenko, V. Yu. enev, V.G. Chernyaev and S.B. Kozelkov	06/23/	1990		
	B36		SU 1541619	A1	Sid	G. Semenov, N.M. lorov, A.I. Zhdanov, V. Kukhar and V.I. Potapenko	02/07/	1990		
	B37		SU 1515164	A1	I.V.	Dementiev and A.S. Papkov	10/15/	1989		
	B38		SU 1408439	A1	a	Merkul, I Yu. Manukin nd M.N. Gurevich	07/07/	1988		
	B39		SU 1388877	A1	N.G.	Parkhomenko, V. Yu. ozbenev and A.P. Kuprovskij	04/15/	1988		

			6	SALI					
- Substitute	for for	n 1449A/PTO	7	3	Co	omplete if Known			
		1	AUG	3 0 2004	Application Number	09/620,544			
			ASC	CLOSURE	Filing Date 07/21/2000				
STA	TEN	MENT BY	X A	₩ŗľ@ynt	First Named Inventor	Petro Estakhri			
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				OTHER PRIOR ART I	NON PATENT LITERATURE DOC	CUMENTS			
Examiner Initials*		Include name of the			the article (when appropriate), title of the item e-issue number(s), publisher, city and/or coun	(book, magazine, journal, serial, symposium,	T2		
iriidais	C1	MENDEL ROSI			The Design and Implementation of a Log-Stru Berkeley, USA				
	C2	BRIAN	DIPERT	and MARKUS LEVY, Designin	g with Flash Memory, book, April 1994, 445 p	gs., Annabooks, San Diego, USA			
	C4	ROSS S. FI	NLAYSO	N and DAVID R. CHERITON, A	n Extended File Service Exploiting Write-Onc	ce Storage, article, 1987, 10 pgs. ACM			
	C5	JASON GAIT, The	Optical F	File Cabinet: A Random-Access	File System for Write-Once Optical Disks, an	ticle, June 1988, 12 pgs., Beaverton, Oregon			
	C6				ent, book, 1995, 19 pgs., Springer-Verlag Ber				
	C7				Distributed File Service Based on Optimistic ACM				
	C8	HIROSHI NAKAM	IURA, JU		MAMIYA and YOSHIHISA IWATA, A Novel Se osium, 1995, VLSI Circuits Digest of Technica				
	C9	HIROSHI NAKAMURA, JUNICHI MIYAMOTO, KENICHI IMAMIYA, YOSHIHISA IWATA, YOSHIHISA SUGIURA and HIDEKO OODAIRA, A Novel Sensing Scheme with On-Chip Page Copy for Flexible Voltage NAND Flash Memories, article, June 1996, 9 pgs., Vol. E79-C, No.6							
	C10	TAKAAKI NOZAKI, TOSHIAKI TANAKA, YOSHIRO KIJIYA, EITA KINOSHITA, TATSUO TSUCHIYA and YUTAKA HAYASHI, A 1-Mb EEPROM with  MONOS Memory Cell for Semiconductor Disk Application, article, 1991, 5 pgs., Journal Of Solid –State Circuits, Vol., 26, No. 4.							
	C11	KAI HWANG and FAYE A. BRIGGS, Computer Architecture and Parallel Processing, book, 1984, McGraw-Hill, Inc., 2 pgs., US							
	C12	WALTER LAHTI a	nd DEAN	McCARRON, State of the Art:	Magnetic VS. Optical Store Data in a Flash, a Hill, Inc., US	rticle, 1990, 7 pgs., Vol. 15, No. 12, McGraw-			
	C13	RON WILSON, I	NTEGRA	TED CIRCUITS; 1-Mbit flash m	nemories seek their role in system design, artic	cle, March 1, 1989, 2 pgs., No.6, Tulsa, OK			
	C14			E.P. EBERHARDT, J.R. RADOS		N, M. MOFIDI, W.LEE, Y. FONG, A. MIHNEA, LEUNG, and T.J. MULROONEY, Serial 9Mb F Intain View, CA			
	C15				eprogrammable memories, article, January 3,				
	C16	RAMON CACERE	S, FRED		MARSH, Operationg System Implications of S , Workshop on Workstation Operting Systems				
	C17	MICHAE	L WU and	d WILY ZWAENEPOEL, A Non-	-Volatile, Main Memory Storage System, 12 p	gs., 1994, ACM, San Jose, CA USA			
	C18			articles on the origins of flash, a	I densities: available with a choice of features and on the differences between NAND and NO tronic Design, v.42, n.10, The Gale Group				
	C19	Samsung Semico	inductor's	s KM29V32000 *flash* memory*	<ul> <li>(Intel's 28F400BV-120 and 28F004BV-120, devices)(Product Announcement), article, Ma n.2056, The Gale Group</li> </ul>	arch 13, 1995, 4 pgs., Electronic News, v.41,			
	C20	SAM WEBER, *F	lash* mod		hall size valued for a host of APPs-Consumer onic Engineering Times, n.911, CMP Media	formats flocking to *flash*, article, 7/22/96, 9			
	C21			TOSHIBA, MOS	MEMORY (NON-VOLATILE), 1995, Data Bo	ok			
	C22	STAN BAKER,	BUT INTE		WARE, SOFTWARE CHANGES: Flash: design ectronic Engineering Times, 1990, N.619, 41,				
	C23	TOSHIBA,	TOSHIBA	A MOS DIGITAL INTEGRATED	CIRCUIT SILICON GATE CMOS, (TC58NS5	12DC) 3/21/2001, 43 pgs., Data Book			
	C24	TOSHIB	A CORPO	ORATION, SMIL (Smartmedia Ir	nterface Library) Hardware Edition Version 1.0	00, July 1, 2000, 36 pgs., Data Book			
	C25	.TOSI	IIBA, TOS	SHIBA MOS DIGITAL INTEGR/	ATED CIRCUIT SILICON GATE, (TC58512FT	), 3/05/2001, 43 pgs., Data Book			
	C26	TOSHIBA	, TOSHIB	A MOS DIGITAL INTEGRATED	CIRCUIT SILICON GATE, (TC58DVM92A1F	FT00), 1/10/2003, 44 pgs., Data Book			
	C27				CIRCUIT SILICON GATE, (TC58DVG02A1F				
	C28				ATED CIRCUIT SILICON GATE, (TH58100FT	), 3/05/2001, 43 pgs., Data Book ice, June 22-24, 1993, Linthlcum Heights, MD			
	C29	JONONVOLATILE	WILWOR		USA USA	Linthicum neights, MD	<del></del>		
	C30	TOSHIB	A CORPO		nterface Library) Software Edition Version 1.00				
	157	ı		TOSHIBA MOS ME	MORY (NON-VOLATILE) 1996 279 nos. Da	ta Rook			

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DAN AUCLAIR, Optimal Solid State Disk Architecure For Portable Computers, symposium, July 9, 1991, 7 pgs., SunDisk Corporation

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